

**REMARKS**

The present invention relates to an adhesive label comprising a circuit substrate, an entire data carrier element for a contactless data carrier system containing an IC chip on at least one surface of the circuit substrate, and an adhesive layer on the entire data carrier element; the adhesive layer can be applied to an article.

Claims 1, 2 and 4-14 are all the claims pending in the application.

**I. Response to Rejection under 35 U.S.C. § 103(a)**

Claims 1, 2 and 4-14 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Tanimura et al. (U.S. Pat. No. 6,065,701) in view of "Applicants' admission."

Applicants respectfully traverse the rejection for the reasons as set forth in the Amendment previously filed December 30, 2005 and the following additional comments addressing each of the Examiner's points.

(1) The Examiner agrees with Applicants' position that "electric circuit" and "electronic components" are two distinct and mutually exclusive terms. See page 4, 1<sup>st</sup> paragraph of the Office Action.

(2) The Examiner maintains his position that Applicants admitted that “separately formed parts (components), including an IC chip, can be at either side of the substrate.” See the paragraph bridging pages 4 and 5 of the Office Action.

The passage relied upon by the Examiner states that “the contactless data carrier element may be prepared by separately forming a part of an electric circuit on each side of the circuit substrate 1, and connecting one to other via a through-hole, to thus integrate the separately formed parts into a sole contactless data carrier element” (page 2, lines 2-4).

The Examiner appears to read the above passage out of context. Specifically, the above passage is one single sentence. This sentence clearly describes that a part of an electric circuit may be formed on each side of the circuit substrate, and one part of an electric circuit is connected to another part of an electric circuit. Further, connecting one part of an electric circuit to another part of an electric circuit results in the separately formed parts of an electric circuit being integrated into a sole contactless data carrier element. An interpretation that “the separately formed parts” includes electronic components is illogical.

In addition, Applicants have clarified in the previous Amendment that no contactless data carrier element carrying a part of electronic components on each side of the circuit substrate existed prior to the priority date of the present application.

Accordingly, Applicants respectfully traverse the Examiner's statement that "Applicants admitted that 'separately formed parts (components), including an IC chip, can be at either side of the substrate.'"

(3) The Examiner states that Fig. 3 of the present specification was not relied upon by the Examiner as the basis of rejection. The Examiner asserts that it would have been obvious to select an alternative equivalent known embodiment as described in "Applicants' admission." See page 5, 1<sup>st</sup> full paragraph of the Office Action.

The present specification described, in the paragraph bridging pages 1 and 2, that Fig. 3 represents a typical conventionally-used adhesive label-type data carrier, and refers to all the components of a typical conventionally used adhesive label-type data carrier by the numerals shown in Fig. 3. The Examiner apparently relies on this passage for "Applicants' admission." Therefore, Fig. 3 actually represents the embodiment for "Applicants' admission," which is relied upon by the Examiner.

In addition, Applicants' so-called "admission" merely indicates that it was known in the art that a part of an electric circuit may be formed on each side of the circuit substrate, and then connected one to other, as an alternative structural arrangement. However, there is no indication or suggestion that it was known that the adhesive layer 5 may be rearranged.

(4) Regarding the advantageous effects of the present invention described in the previous Amendment, it was asserted that: (i) Applicants have not provided any comparative data; (ii) the present claims do not recite the thickness; (iii) the present claims do not recite the manufacturing steps; (iv) the manufacturing cost bears no patentable weight; and (v) Applicants have not shown a nexus between the commercial success and the differences exhibited by the present invention over the prior art. See the paragraph bridging pages 5 and 6 of the Office Action.

The advantageous effects are presented to show the unexpected superiority of the present invention, thereby rebutting any *prima facie* case of obviousness. There is no requirement that the advantageous features be recited in the claims.

Further, Applicants submit herewith a Declaration Under 37 C.F.R. § 1.132 executed by Mr. Masateru Yamakage. The Declaration demonstrates the unexpected superiority of the present invention and further supports the patentability of the present invention.

Specifically, in the Declaration, Experiment A and Comparative Experiments A, B and C were prepared. In all of Experiment A and Comparative Experiments A, B and C, the circuit substrates carrying the contactless data carrier element were prepared in the same manner.

However, in Experiment A, a layer of an acrylic pressure sensitive adhesive having a thickness of 26  $\mu\text{m}$  was formed on a release sheet prepared by coating a glassine paper with a

silicone resin, and the acrylic pressure sensitive adhesive layer was stuck to the circuit substrate on the surface carrying the contactless data carrier element.

In Comparative Experiment A, a layer of an acrylic pressure sensitive adhesive having a thickness of 46  $\mu\text{m}$  was formed on a polyethylene terephthalate film having a thickness of 25  $\mu\text{m}$ , and the acrylic pressure sensitive adhesive layer was stuck to the circuit substrate on the surface carrying the contactless data carrier element; thereafter, a layer of an acrylic pressure sensitive adhesive having a thickness of 26  $\mu\text{m}$  was formed on a release sheet prepared by coating a glassine paper with a silicone resin, and the acrylic pressure sensitive adhesive layer was stuck to the circuit substrate on the reverse side of the surface carrying the contactless data carrier element.

Comparative Experiment B was prepared in the same manner as Comparative Experiment A, except that a layer of an acrylic pressure sensitive adhesive having a thickness of 124  $\mu\text{m}$  was formed on a polyethylene terephthalate film having a thickness of 25  $\mu\text{m}$ .

Further, Comparative Experiment C was prepared in the same manner as Comparative Experiment A, except that a layer of an acrylic pressure sensitive adhesive having a thickness of 228  $\mu\text{m}$  was formed on a polyethylene terephthalate film having a thickness of 25  $\mu\text{m}$ .

Experiment A on one hand, and Comparative Experiments A, B and C, on the other, are also illustrated in Figures A and B of the Declaration, respectively.

Experiment A and Comparative Experiments A, B and C were then evaluated in terms of thickness and printability. The results are reproduced below:

	Printability	Thickness ( $\mu\text{m}$ )		
		Adhesive layer containing element	Portion containing IC chip	Portion without IC chip
Experiment A	B	26	335	179
Comparative Experiment A	C	46	373	222
Comparative Experiment B	C	124	441	293
Comparative Experiment C	A	228	494	406

As can be seen from the data in the above table, Experiment A, according to the present invention, though the thinnest among Experiment A and Comparative Experiments A, B and C, provides good printability without substantial influence of an irregular or uneven structure due to the antenna coil and particularly the IC chip, as compared to Comparative Experiments A, B and C.

In view of the foregoing reasons, Applicants respectfully submit that the present claims are not obvious over the cited references, and thus the sole rejection of claims 1, 2, and 4-14 should now be withdrawn.

## II. Conclusion

In view of the above, reconsideration and allowance of claims 1, 2 and 4-14 are now believed to be in order, and such actions are hereby earnestly solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the local Washington, DC telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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